

Work Order ID 79407

Wednesday, January 25, 2012 3:06:09 PM

79407

Feb 8th

Page 1

Item ID: D206-642-612

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Float Skidtube RH

Start Date: 1/25/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/31/2012 Req'd Qty: 1.00

1

Customer:

Reference: REWORK

DART		TEL: 1-613-632-3336 FAX: 1-613-632-4443	
TRANSPORT CANADA APPROVAL #09-89			
P/N	D206-642-612	CHG	CHG004
DESC	Float Skidtube RH	SIC	SH98-4
LOT	B36959	SIC	SA00475SE
MODEL	Bell 206A/B	SIC	
US PATENT # 5,735,884 CANADA FOREIGN PATENTS PENDING		MADE IN CANADA	

Approvals: Process Plan: *mk*

Date: *2-01-25* Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
IIN D206-642	0

150

0.00

150

HandFinish

Memo

0.00

Hand Finishing

PULL FROM STOCK D206-642-612 B 36959

CHG004

REMOVE CAP AND WASH LPS3 OUT OF TUBE PER ECN 09-616

12-01-30 (1)
12-1-31

160

QC5- Inspect part completeness to step on W/O

0.00

160

QC

Memo

0.00

Quality Control

12-01-31 (1)

170

0.00

170

HandFinish

Memo

0.00

Hand Finishing

RE-ASSEMBLE I D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/RSikaflex-291 *119508*

Sikaflex expire date: *12/08*

B79407

12-1-31

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79407***79407***

Page 2

Wednesday, January 25, 2012 3:06:09 PM

Item ID: D206-642-612

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Float Skidtube RH

Start Date: 1/25/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/31/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference: REWORK

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00

180

QC

Memo

0.00

Quality Control

12 01 - 31 (1)

190

Pick Kit

0.00

190

Packaging

Memo

0.00

Packaging

REMOVE D3672-5 X 16
AND REPLACE WITH D3672-7 X 16
PER DSI 9467 (ECN 09-616)

12/1/12

200

QC4- 100% Inspect kits for completeness

0.00

200

QC

Memo

0.00

Quality Control

5/2/201

(70)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79407***79407***

Page 3

Wednesday, January 25, 2012 3:06:09 PM

Item ID: D206-642-612

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Float Skidtube RH

Start Date: 1/25/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/31/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference: REWORK

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

Identify as per dwg & Stock Location: _____

0.00

210

Packaging

Memo


0.00

Packaging

ID AND STOCK UNDER NEW BATCH NUMBER AND NEW CHANGE
NUMBER

ADD NEW PAPERWORK

CHG004

 12-02-01

220

QC21- Final Inspection - Work Order Release

0.00


220

QC

Memo

0.00

Quality Control

M.C.J 12/02/01 

12-02-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, January 25, 2012 3:06:09 PM

Page 1

Work Order ID: 79407

Parent Item: D206-642-612

Parent Item Name: Float Skidtube RH

Start Date: 1/25/2012

Required Date: 1/31/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B05.10.27 Revised pick list KJ/EC
IPP Rev:C 07-02-23 As per IIN D206-642 Rev K JLM
IPP Rev:D 07-12-05 ECN 1080p Rev:L DD verified by:ec
IPP Rev:E 09-01-06 update part list DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3672-5		Manufactured	No				Each	1,864.0000					
---------	--	--------------	----	--	--	--	------	------------	--	--	--	--	--

Phenolic Washer

Location	Loc Qty	Loc Code
ST060	1864	
35521	1075	
44679	220	
50354	569	

D3672-7		Manufactured	No				Each	1,068.0000					
---------	--	--------------	----	--	--	--	------	------------	--	--	--	--	--

Phenolic Washer

Location	Loc Qty	Loc Code
ST060	1068	
73488	68	
76279	1000	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

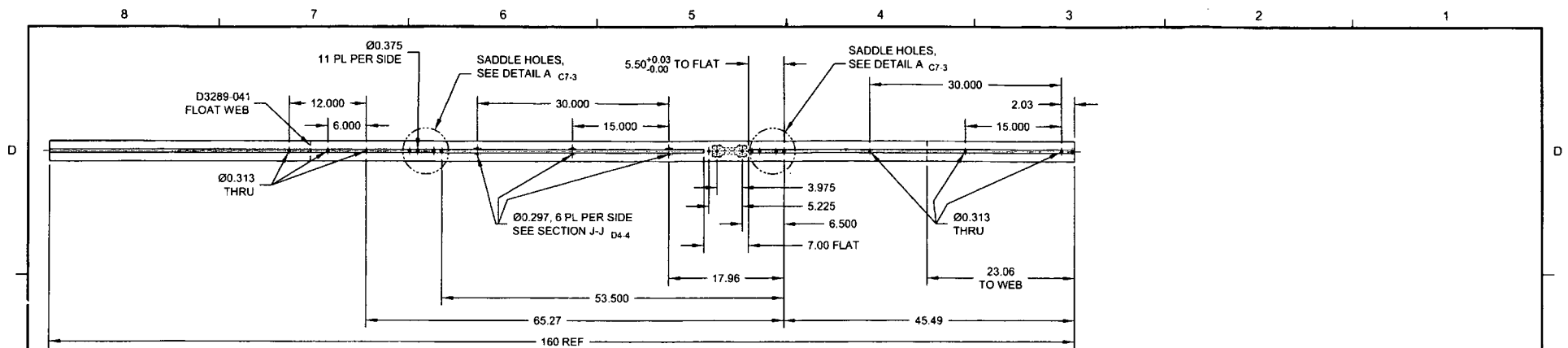
Qty -041	Part Number	Description
X	D3288-041	SKIDTUBE ASSEMBLY
1	D2600-1-240	EXTRUSION
1	D2646	AFT CAP
1	D2647	CAP
9	D2649	CROSS BOLT SPACER
6	D3275-1	CROSS BOLT SPACER
2	D3286-1	DOUBLER
2	D3286-3	SPACER
1	D3289-041	FLOAT WEB
1	D3413-1	RING
1	D3415-041	NUT PLATE
1	D3535-15	WEARSHOE
1	D3535-21	WEARSHOE
1	D3535-35	WEARSHOE
1	D3535-41	WEARSHOE
1	D3536-15	GASKET
1	D3536-21	GASKET
1	D3536-35	GASKET
1	D3536-41	GASKET
7	D3537-1	WEARPAD
1	D3537-3	WEARPAD
12	D3683-1	INSERT
64	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
66	AN3C4A	BOLT
1	AN4C5A	BOLT
1	AN960C416	WASHER
78	AN960C10L	WASHER
2	CCR264SS3-3	RIVET
2	CR3212-4-03	RIVET
52	CR3212-4-04	RIVET
12	MS27039C1-05	SCREW (or AN3C3A BOLT)
2	NAS1515H3L	WASHER

GENERAL NOTES:

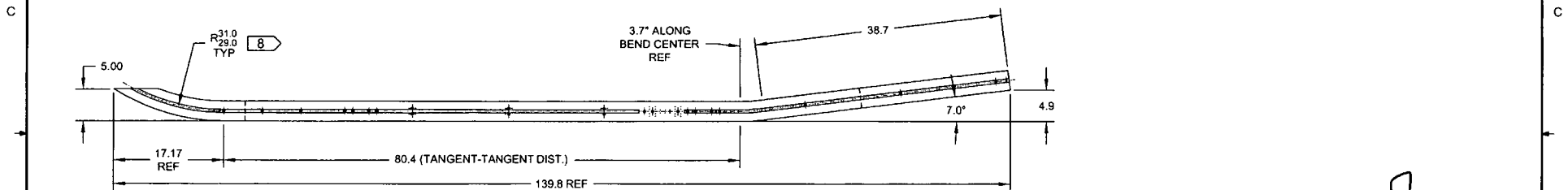
- MATERIAL: N/A
- FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- IDENTIFICATION: NONE
- WEIGHT: 20.8 LBS
- DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- BOND D3289-041 FLOAT WEB INTO D3288-1 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
- ALL HOLES DRILLED ON CENTERLINES EXCEPT WHERE SHOWN
- DRILL Ø0.297 HOLES FOR D3683-1 INSERTS BEFORE FINISH. INSTALL D3683-1 INSERTS AFTER FINISH
- DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3288-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/291
- WELDING: PER DART QSI 004
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

#79407
RELEASED
09/06/17

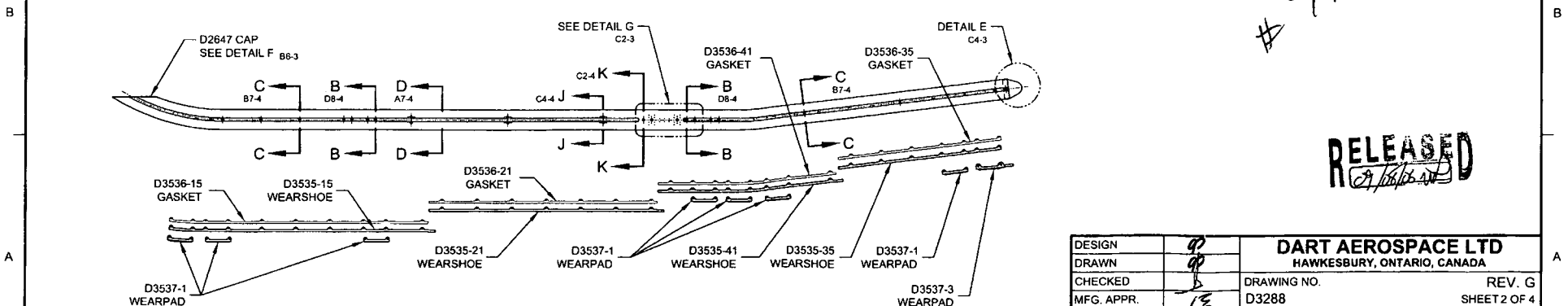
G	REFORMAT DWG, RMV LPS-3 (ZN B8-3) RMV C'BORE & ADD SECTION K-K (ZN C2-4)	CP	09.06.17
F	SUBSTITUTE FLOAT BAG INSERT W/SPEC CTRL DWG WAS ALS7-1032-130; IS NOW D3683-1	DC	07.11.21
E	MID-FLOAT HOLES WERE MOVED 2.00" FWD AND ROTATED INBOARD AND OUTBOARD BY 17° INSERTS ARE NOW INSTALLED AT THESE LOCATIONS	MB	07.09.14
D	DIMENSIONS ADDED	DC	07.06.04
C	NEW INSERTS, SS WEARSHOES AND GASKETS	PH	06.12.19
B	CHANGE INSERTS	CP	05.03.18
A	NEW ISSUE	CP	04.05.17
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CP		
CHECKED	—		
MFG. APPR.	—		
APPROVED	—		
DE APPR.	—	DRAWING NO. D3288 TITLE SKIDTUBE ASSEMBLY DATE 09.06.17	
		REV. G	SHEET 1 OF 4
		SCALE	NTS
<small>COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>			



D3288-041 DRILLING/WEB ASSEMBLY DETAIL



D3288-041 BENDING DETAIL

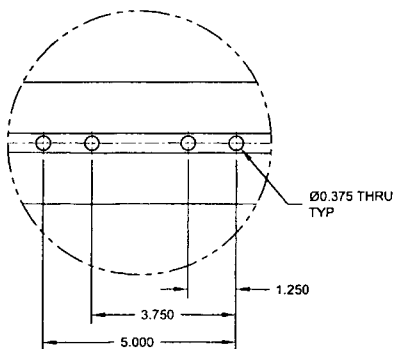


D3288-041 WELDING DETAIL/SKIDTUBE ASSEMBLY

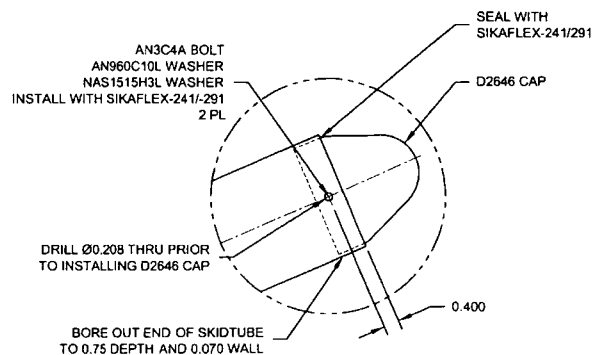
79407

RELEASED

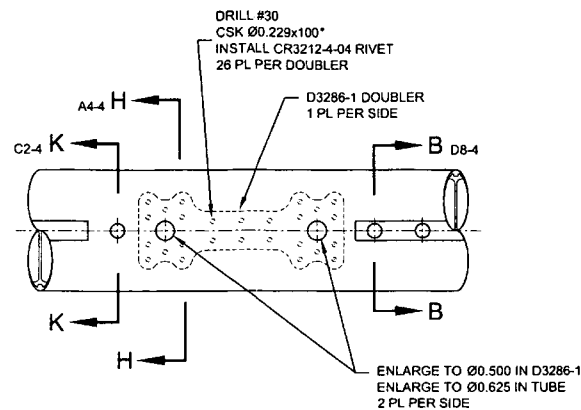
DESIGN		DART AEROSPACE LTD	
DRAWN	JP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	J	DRAWING NO. D3288	REV. G SHEET 2 OF 4
MFG. APPR.	LF	TITLE SKIDTUBE ASSEMBLY	SCALE NTS
APPROVED	AN	COPYRIGHT © 2004 BY DART AEROSPACE LTD	
DE APPR.	AN	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
DATE	09.06.17		



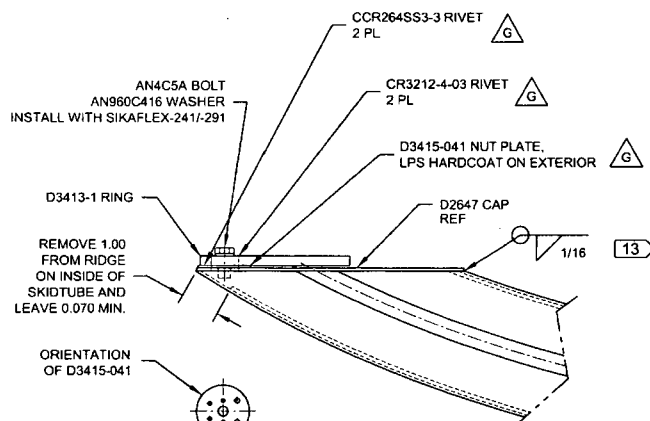
DETAIL A: DRILL DETAIL D6-2, D4-2
SADDLE HOLES, SCALE 5X



DETAIL E B3-2
SCALE 5X



DETAIL G B5-2
SCALE 5X



- DETAIL F NOTES**
1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D2647 (TRIM AS NECESSARY)
 4. WELD D2647 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

DETAIL F: END FINISHING DETAIL B7-2
SCALE 5X

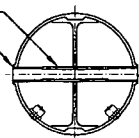
#79407

RELEASED
09/06/17

DESIGN	99	DART AEROSPACE LTD	
DRAWN	99	HAWKESBURY, ONTARIO, CANADA	
CHECKED	99	DRAWING NO.	REV. G
MFG. APPR.	99	D3288	SHEET 3 OF 4
APPROVED	99	TITLE	SCALE
DE APPR.	99	SKIDTUBE ASSEMBLY	NTS
DATE	09.06.17	<small>COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

D2649 SPACER

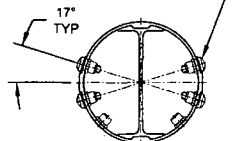
13



AFTER DRILLING AND BENDING ASSEMBLY, PERFORM THE FOLLOWING FOR Ø0.375 SADDLE HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE TO Ø0.313x0.75 DEEP

B7-2, B5-2, D1-3 **SECTION B-B**
FOR Ø0.375 SADDLE HOLES ONLY
8 PL, SCALE 5X

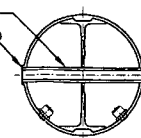
AFTER FINISH, INSTALL D3683-1 INSERT AND PLUG INSERTS USING MS27039C1-05 SCREWS AND AN860C10L WASHERS 12 PL



17" TYP
11 **SECTION J-J**
SCALE 5X D5-2, B6-2

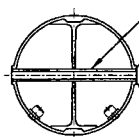
D2649 SPACER

13

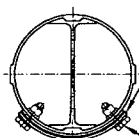


AFTER DRILLING AND BENDING ASSEMBLY, PERFORM THE FOLLOWING FOR THIS HOLE ONLY:
1. CHAMFER HOLE 0.030x45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH

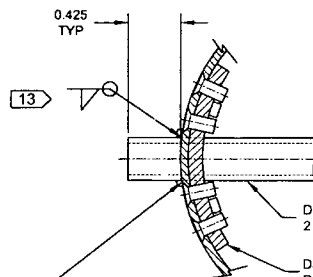
B5-2 **SECTION K-K**
1 PL, SCALE 5X



D3275-1 SPACER
13
CHAMFER 0.030x45° TYP
SECTION C-C
B7-2, B4-2
FOR Ø0.313 HOLES ONLY
6 PL, SCALE 5X



GASKET WEARSHOE WEARPAD REF
ALS7-1032-130 INSERT
AN3C4A BOLT
AN860C10L WASHER
64 PL
12 **SECTION D-D**
B6-2
FOR WEARSHOES INSTALL ONLY
32 PL, SCALE 5X



0.425 TYP
13
TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH ROUND TUBE
2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
3. ENLARGE HOLES IN D3286-1 TO Ø0.500
4. ENLARGE HOLES IN TUBE TO Ø0.625
5. RIVET D3286-1 TO TUBE
6. INSERT D3286-3 SPACER
7. WELD IN PLACE AND GRIND FLUSH

SECTION H-H
D3-3
NOT TO SCALE

#79407

RELEASED
09/18/06

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. G
MFG. APPR.		D3288 SHEET 4 OF 4
APPROVED		TITLE SCALE
DE APPR.		SKIDTUBE ASSEMBLY NTS
DATE	09.06.17	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES, OR COPIED, OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

4.9 206A/B HIGH GEAR FLOAT SKIDTUBES, TRI-BAG COMPATIBLE (D206-642)
 32.19 206A/B HIGH GEAR FLOAT SKIDTUBES, TRI-BAG COMPATIBLE (ICA-D206-642)

ITEM	QTY -611	QTY -612	QTY -613	QTY -614	QTY -641	QTY -654	PART NUMBER	DESCRIPTION
	X						D206-642-611	SKIDTUBE INSTALLATION, LH
		X					D206-642-612	SKIDTUBE INSTALLATION, RH
			X				D206-642-613	SKIDTUBE INSTALLATION, LH, THRU BOLT
				X			D206-642-614	SKIDTUBE INSTALLATION, RH, THRU BOLT

IS:

12B	16	16	16	16			D3672-7	WASHER
-----	----	----	----	----	--	--	---------	--------

WAS:

12B	16	16	16	16			D3672-5	WASHER
-----	----	----	----	----	--	--	---------	--------

9467

DESIGN	CP	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	CP		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9467	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		WASHER CHANGE	NTS
DATE	09.06.17	COPYRIGHT © 2009 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	